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ABSTRACT

Increased interest in research into school level environment has not been extended to special education in the United Kingdom, but J. E. Adams (1998) found evidence that differences in pedagogic practice between schools for children with moderate learning disability (MLD) and severe learning disability (SLD) were in part attributable to school level climate. In order to find a method more parsimonious of time than detailed qualitative study, an instrument, the Special School Level Environment Questionnaire (SSLEQ), was developed to identify differences between varying special settings. A 50-item questionnaire was sent to teachers in MLD (n=24), SLD (n=27), and inclusive mainstream schools (n=22) in the north of England. The rank sum test was used to test significance of differences between scores for the three types of schools for each of the seven dimensions of the SSLEQ. Significant differences were found more commonly between the special sector and mainstream settings and existed in the dimensions of special purpose, individualization, and empowerment. The highest level of individualization, considered a positive aspect of the environment both in research and by central government, was found in SLD schools and the lowest in inclusive settings. There is a need to reconcile these two aspects of policy if "best practice" is to be perpetuated in mainstream settings. (Contains 2 tables, 2 figures, and 23 references.) (Author/SLD)

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Development of an instrument to evaluate school level environments in the special sector - the Special School Level Environment Questionnaire (SSLEQ)

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Abstract

Increased interest in research into school level environment has not been extended to the special sector in the UK and yet, in a qualitative case study, Adams (1998) found evidence that differences in pedagogic practice between schools for children with moderate learning disability (MLD) and with severe learning disability (SLD) were in part attributable to school level climate. In order to find a method more parsimonious of time that detailed qualitative study an instrument, the Special School Level Environment Questionnaire (SSLEQ), was developed to identify differences between varying special settings, including the inclusive contexts advocated in UK government policy.

A 50 item questionnaire was sent to teachers in MLD, SLD and inclusive mainstream schools in the north of England. The rank sum test was used to test significance of differences between scores for the three types of school for each of the 7 dimensions of the SSLEQ. Significant difference was found more commonly between the special sector and mainstream settings and existed in the dimensions of special purpose, individualisation and empowerment. The highest level of individualisation, considered a positive aspect of the environment both in research and by central government, was found in SLD schools and the lowest in inclusive settings. There is a need therefore to reconcile these two aspects of policy if "best practice" is to be perpetuated in mainstream settings.

The instrument discriminated between different kinds of provision and has the potential to provide teachers with a means of evaluating aspects of the learning environment in different types of special setting.

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Objects and purposes

Study of classroom learning environments has revealed their significance as determinants of pupil outcomes, both cognitive and affective. More recently, attention has been given to school level environments and to their relationship to school effectiveness. This research aims to extend the study of school level environment by providing an instrument to enable the special sector to be included.

Special schools, from their designation, might be expected to be "special" or different from mainstream schools. For some time now in the UK, at least since the publication of the Warnock Report in 1978, there has been acknowledgement of the desirability of educating children identified as having "special educational needs" within mainstream schools alongside their peers. More recent documentation from central government in England would appear to approve and seek to further this policy of inclusion (DfEE 1997, DfEE 1998), but the Department for Education and Employment has affirmed that for some children education within special schools may remain appropriate (DfEE, 1998). Thus it would seem that the special school should increasingly be somewhere very special, a provision for children whose disabilities are significant. Segregated special schools might therefore provide distinctive learning environments. This research seeks to develop an instrument to discover, through teachers' perceptions, whether special schools do indeed have psychosocial environments which are distinct from inclusive settings.

The context of the research

Evaluation of school level climate has become evident in the literature of learning environments resulting in the development of school level instruments (Rentoul and Fraser 1983, Fisher et al., 1986, Fisher and Fraser, 1990). Creemers et al. (1989) asserted that a school's environment is a major factor in its effectiveness and therefore the study of school level environments has as its purpose the improvement of those environments. With much of the documentation emerging from central government in England expressed in a language of school improvement, the development of means to evaluate school factors is apposite at this time.

School level environment instruments have been used to identify variances between different types of school in differing phases of education (Docker et al., 1989). Of late, such instruments have been developed for different types of school (Dorman, 1996). Little research, however, has been carried out into the special school environment.

Adams (1998), in a qualitative study of the learning environments of schools for children with moderate learning disabilities (MLD) and severe learning disabilities (SLD), found significant differences between the two types of school. She found also that though the impact of national initiatives upon the special sector had been considerable, this could be mediated at school level. Such school level mediation had a notable impact upon curriculum delivery and the nature of teaching and learning which took place. Thus school level environment might be expected to be highly significant in the special sector.

Larrivee et al. (1997), evaluating the varying effectiveness of schools for children with special needs, point to an historical tradition which focuses research in special education upon "disabilities rather than schools". Phtiaka (1997) suggests that the paucity of research in particular into the sociological aspects of special schooling may reflect a hierarchical value placed on different types of school. And again, because of a narrow interpretation of disability, research into special education has focused on "placement and service delivery options rather than on the broader school environments" (Larrivee et al. 1997).

In developing an instrument to evaluate special school level environments, this research draws upon the literature relating to special education, including recent policy documents emerging from central government in the UK, existing school level environment questionnaires, and the opinions of professionals working in segregated and inclusive settings in England. Again, with a policy of inclusion again to the fore in England and Wales, it seeks to help teachers to identify positive aspects of school level learning environments in the special sector so that they might seek to maintain them in new settings.

Methodological issues

To develop a school level environment questionnaire for Roman Catholic schools (CSEQ) in Australia, Dorman (1996) sought to define dimensions which might be particular to schools which provide education for a subset of children based on religious beliefs. Such schools might be expected to have a particular ethos relating to their purpose, in the case of the CSEQ the fostering of religious belief. Segregation in special education takes place because of identified learning disabilities. Thus some

dimensions of existing school level environment questionnaires might be expected to exist in all schools, but special schools too might be expected to have aspects related to their particular purpose, their raison d'être.

Existing school level environment questionnaires were examined to identify aspects of the psychosocial environment which might, from the literature and professional opinion, remain relevant in the special sector. Attention was also paid to the Work Environment Scale (WES., Moos, 1981) wherein were identified three broad dimensions of the work environment; relationships, personal development, and system maintenance and system change. A questionnaire with 50 items was created to be answered by teachers in special settings. Response to each item is by means of a five point Likert scale, some of which are reverse scored. Seven dimensions of special school level environment were identified. Of these, some are modifications of existing instruments (SLEQ, Fisher and Fraser, 1991; CSEQ, Dorman, 1996) whilst others were evolved with the special environment in mind.

Defining dimensions of the special environment:

The seven dimensions of the learning environment of special schools or units were defined for the purposes of the research:

Special purpose. This dimension seeks to identify how the school and its staff define its purpose and goals in relation to its pupils with statements of special educational need.

With much emphasis in official literature relating to special education on the identification and meeting of individual need, ***individualisation*** emerges in discussion with special educators as a preoccupation. It exists not simply at classroom level, but at the level of policy and is therefore a dimension of the special school environment. The "student support" of Dorman (1996) and of Fisher and Fraser (1990) examines relationships between staff and pupils. Challenging behaviours in special settings may be related to the disabilities with which the school deals and in this instrument it is subsumed into the individualisation dimension.

Hill (1995, p.103) suggested that the special school might be expected "to address holistically" the needs of each child. In many special schools professionals other than teachers (therapists, medical personnel, psychologists) play a significant role. High levels of parental involvement are advocated by government. ***Holism*** is therefore an identified dimension.

Working in a special setting makes demands of teachers which are different from those in mainstream classrooms. The ***professional interest*** dimension investigates whether teachers are interested in their work, share ideas in discussion and engage in continuing professional development.

Male and May (1997) found that teachers of pupils with special educational needs in special schools reported higher levels of exhaustion than their counterparts working in mainstream schools. Within the segregated sector, Male and May found that differential workloads were reported by teachers in different types of special school. Thus ***work pressure*** may be expected to have particular significance.

Empowerment relates to the freedom which individual teacners have to make professional decisions. It may also relate to ability to take an interpretive stance towards national initiatives based upon an understanding of the needs of children in the school.

Special schools are resourced differently from mainstream schools. Pupil:teacher ratios are lower, special support assistants (SSAs) may work in classrooms, but requirements for specialised equipment may be greater and more varied. For these reasons, questions relating to ***resource adequacy*** were adapted to suit the special school context.

Figure 1 allocates the dimensions of the SSLEQ to the 3 categories of Moos's WES:

Relationship	Personal Development	System maintenance/system change
Individualisation	Professional interest	Work pressure
Special purpose		Empowerment
Holism		Resource adequacy

Figure 1 - dimensions in the categories of Moos' WES

whilst figure 2 provides examples of statements in each dimension.

Dimension	Sample statement
Special purpose	This school is organised in ways which meet its special purpose in relation to children with special educational needs .
Individualisation	Teachers' lesson plans reflect differences in pupils' Individual Education Plans.
Holism	This school makes provision for pupils' developmental needs beyond those of the curriculum.
Professional interest	Many teachers from this school attend inservice and professional development courses.
Work pressure	The nature of pupils in this school means that teachers are exhausted.
Empowerment	I participate in decisions about pupils, including attending case conferences and annual review meetings.
Resource adequacy	There is usually sufficient personnel in the classroom to support pupils' learning.

Figure 2 - examples of statements in each dimension of the questionnaire

Data sources

The questionnaire was completed by teaching staff from 9 special schools and 5 mainstream schools with substantial provision for children with special educational needs in the north of England. Within these mainstream schools the Special Educational Needs Co-ordinators (SENCOs) were asked to identify teachers with significant responsibility in the area of special education as respondents in the research. In all, 27 questionnaires were returned from SLD school, 24 from MLD schools and 22 from mainstream.

Analysis

For each teacher who completed a questionnaire, the sum of the scores for each dimension was calculated and divided by the number of statements related to that dimension to obtain a value between 1 and 5. The means and standard deviations, all of which were high, of the scores for the different types of school are shown in table 1.

	SLD Schools		MLD Schools		Mainstream	
Dimension	**Mean**	**Std. dev.**	**Mean**	**Std. dev.**	**Mean**	**Std. dev.**
Special purpose	4.02	0.39	3.94	0.48	3.73	0.40
Holism	3.78	0.45	3.80	0.35	3.97	0.41
Individualisation	4.01	0.31	3.63	0.36	3.65	0.33
Resource adequacy	3.16	0.74	3.18	0.65	3.52	0.53
Professional interest	3.87	0.54	3.77	0.50	3.75	0.41
Work pressure	4.01	0.47	3.87	0.38	3.86	0.42
Empowerment	3.88	0.72	3.89	0.66	3.36	0.67

Table 1 - teachers' mean scores and standard deviations of the scores

The rank sum test was used to test the significance of differences between the scores from the 3 types of schools for each of the 7 dimensions, a total of 21 tests. Differences found to be significant using 2-tailed tests are presented in table 2.

Dimension	Significant difference	Significance level
Special purpose	SLD - mainstream	0.05
Individualisation	SLD - MLD	0.001
	SLD - mainstream	0.001
Empowerment	SLD - mainstream	0.05
	MLD - mainstream	0.01

Table 2 - Significant differences

Findings of the research

Where significant difference was found it was more commonly between the special sector and mainstream settings. In the dimension of empowerment, while the means for both sets of special school were close, significant difference was found between special schools and mainstream. The special purpose dimension produced high means from both MLD and SLD school groups whilst the score from mainstream schools was significantly lower than in SLD schools. The individualisation dimension differentiated between both SLD and mainstream and SLD and MLD schools, with the highest score emerging from the SLD teachers' responses.

Although the results from all three school groups are close in the dimension of work pressure, they do reflect the hierarchy reported by Male and May (1997), with the SLD teachers feeling the greatest demands, followed by the MLD and then mainstream teachers. In the dimension of holism, perhaps surprisingly, inclusive settings produced the highest score, with differences between mainstream and both types of special school approaching significance.

Discussing the outcomes of the research

In the sample of schools used in the development of the SSLEQ, results from differing types of provision in the special sector were found to be most similar in resource adequacy and professional interest. Although this might appear to indicate that teachers feel that they have similar levels of resourcing, all the means were low in comparison with other dimensions and there were differences between schools within each group, and indeed between the perceptions of teachers within a single school. In contrast, all three groups of schools produced high means in professional interest, indicating that special educators have opportunities to consider and develop their practice.

One surprising outcome was that the highest reported perceptions in the dimension of holism emerged from the mainstream settings. Hill (1995, p.103) suggests that the special classroom might be expected "to address holistically" the needs of each child. The findings of this research indicate that such classrooms need not be located in segregated provision, that the need of the whole child might be addressed successfully in the mainstream school. Access to specialists other than teachers appears not to be problematic in mainstream schools, and the inclusive setting may offer greater opportunities for social development.

Of the results where significant difference was found, that relating to empowerment, where both MLD and SLD schools differed from mainstream, may be attributable to school size. As special schools tend to have fewer staff and their senior management teams are smaller, there is less need for formal administrative structures. Teachers may feel closer to decision making processes relating both to organisational matters and children's learning and development.

That the highest level of individualisation should emerge from the SLD schools was, perhaps, unsurprising. A population trend in the UK, whereby children with increasingly complex disabilities are surviving infancy and on entering education are placed in SLD schools means that, for this group of children, the aetiology of whose learning disabilities is increasingly diverse, differing responses must be made to meet their various and individual needs. Significant difference was also found in this dimension between SLD and MLD schools, reflecting the distinction found by Adams (1998). Corbett and Norwich (1999), too, indicate that there is considerable variance in practice between schools providing for different degrees of learning disability, but it is in the area of pedagogic practice that "vary considerably". Although, as Dorman et al. (1995, p.333) state

> "classrooms do not exist in isolation from the wider school-level environment",

some aspects of school level environment might be assumed to impinge more directly upon the teaching and learning which takes place within classrooms. Of the identified school level dimensions within the SSLEQ, that of individualisation had been identified as a preoccupation of special educators. Levels of individualisation, of curriculum and of response to behaviours, have been found to be predicated upon teachers' constructs of the disabilities of their pupils (Adams, Swain and Clark, 2000), with SLD pupils considered to require "very special" provision, and it appears that this is more readily available in the SLD school than within other special provision.

Special purpose, which was also highest in SLD schools, and where significant difference was found between SLD and mainstream schools, may also be attributable to the nature of the pupil population in the SLD schools.

Conclusions

The detailed case study approach of Adams (1998) yielded evidence that pedagogic practices in the MLD and SLD context differed, and that an explanation for these differences lay in contrasting school level response to national initiatives, such as the National Curriculum and its attendant testing, and systems of accountability. Where schools' response had been to "implement" national changes (Bowe and Ball, 1992), as in the MLD context, this had led to a focus upon managing behaviour in order to teach curriculum content, to be tested later in SATs. In the SLD context, where an interpretive response was in place, pedagogy was more thoughtful and child centred. It was upon these findings that the SSLEQ was hypothesised in an attempt to find a means to evaluate school level climate which was more parsimonious of time (Trickett and Moos, 1973) than qualitative case study and which would make it possible for teachers to identify whether the positive aspects of learning environments in the segregated special sector might remain present in inclusive settings.

The principal purpose of any special educational setting is that it should provide appropriately for children identified as having SEN. Teachers in all three types of school identified a special purpose in relation to pupils with special educational needs, but there was significant difference between the scores of SLD and mainstream teachers. Individualisation which, like special purpose, was designed as a relationship category in terms of Moos' WES, produced significant differences between all three types of school. The third dimension which yielded significant difference between school type, empowerment, indicates that teachers in special schools consider themselves more directly involved in decision making and taking in relation to special children, and as a system maintenance/system change category may be related to the relatively larger size of mainstream schools.

The instrument was, then, able to discriminate between types of special provision but there were indications within the analyzed data that individual schools yielded a response pattern which differed from other schools of the same type. There are many possible explanations for this, including the size and location of schools, which might be resolved by patterns emerging in a larger sample. As questionnaire results from some schools within each group yielded responses which were individualistic, one purpose which the instrument may serve is to identify particular cases which merit

detailed qualitative study into their learning environment to produce a "grain size" fine enough (Lemke, 1995) for more precise lessons to be learned.

Whilst all learning environments emerge from an elaborate interplay of levels of influence, the learning environment of the special sector in England is particularly complex at a time of continuing national change. One of the difficulties in finding a sample for this research, for instance, was the identification of special provision within a geographical region which was not undergoing reorganisation, with attendant opening and closing of schools. It has been possible to identify those positive aspects of the segregated special school which are more readily maintained or indeed better provided in the mainstream school, and those areas in which increasing effort will need to be made. With much of the documentation emerging from central sources in the UK laying emphasis upon the identification and meeting of individual needs, but within inclusive settings, it would appear that challenges remain if these two are to be reconciled.

References

Adams JE., 1998, *A special environment? Learning in the MLD and SLD classroom*. Unpub. PhD thesis, University of Northumbria at Newcastle.

Adams JE., Swain J., Clark J., 2000, What's so special? Teachers' models and their realisation in practice in segregated schools. *Disability and Society*, 15, 2, 233-245

Bowe R. and Ball S.J. with Gold A. (1992) *Reforming Education and Changing Schools: case studies in policy sociology*. London: Routledge

Barton L. and Tomlinson S., 1984, *Special Education and Social Interests*. Croom Helm. London

Corbett J and Norwich L (1999), Learners with special educational needs in ed. P. Mortimore *Understanding Pedagogy and its Impact on Learning*. Sage Publications. London.

Creemers B., Peters T., Reynolds D., (eds.) 1989, *School Effectiveness and School Improvement*, Lisse: Swets and Seitlinger

DFEE (1997) *Excellence for all Children: Meeting special educational needs*. London: The Stationery Office.

DfEE (1998) *Teachers: meeting the challenge of change*.The Stationery Office.

Docker J., Fisher DL., Fraser BJ., 1989, Differences in the psychosocial work environment of different types of school. *Journal of Research in Childhood Education*, 4, 5-7

Dorman JP, 1996, School Environment Questionnaire: an instrument developed for Australian Catholic Seondary Schools. Journal of Christian Education, 39, 1, 31-44

Dorman JP., Fraser BJ., McRobbie CJ., 1995, Associations between school level environment and science classroom environment in secondary school. *Research in Science Education*, 25, 3, 333-351

Fisher DL. and Fraser BJ., 1990, Validity and use of the school-level environment questionnaire. Paper presented at Annual Meeting of AERA, Boston, MA, Apr 1990

Fisher DL. et al., 1986, Assessment of teachers' perceptions of school-level environment. Paper presented at a symposium "Research on Classroom and School Environment", Annual Meeting of the National Association for Research in Science Teaching, San Francisco, CA, Mar-Apr. 1986

Hill J., 1995, Entering the Unknown: Case-study analysis in special schools in eds. L. Clough and L. Barton *Making Difficulties: Research and the Construction of Special Educational Needs*. Paul Chapman Publishing Ltd.

Larrivee B., Semmel MI., Gerber MM., 1997, Case studies of 6 schools varying in effectiveness for students with LDs. *Elementary School Journal*, 98, 1, 27-50

LeCompte MD ,1970 The uneasy alliance of community action and research *School Review* 79, 125-132.

Lemke J.L. (1995) *Textual Politics: Discourse and Social Dynamics*. London: Taylor and Francis.

Male D.B. and May D., 1997, Stress, burnout and workload in teachers of children with special educational needs. *British Journal of Special Education* 24,3,133-140

Moos RH., 1981, *Manual for Work Environment Scale*. Palo Alto CA. Consulting Psychologists Press

Rentoul AJ. and Fraser BJ., 1983, Development of a school-level environment questionnaire. *Journal of Educational Administration*, 21, 21-39

Tomlinson S., 1982, *A Sociology of Special Education*. London Routledge and Keegan Paul

Trickett E.J. and Moos R.H. (1973) Social environment of junior high and high school classrooms. *Journal of Educational Psychology*, 65, 1, 93-102

Warnock H.M. (Chairman) (1978) *Special Educational Needs. Report of the Enquiry into the Education of Handicapped Children and Young People. (The Warnock Report)*, London: HMSO